

Samuel Borries
On-Scene Coordinator
USEPA, Region 5
77 West Jackson Boulevard

Mail Code: SE-5J Chicago, IL 60604-3507

Richard Karl Superfund Division Director USEPA, Region 5 77 West Jackson Boulevard Mail Code: SE-5J Chicago, IL 60604 Leslie A. Kirby-Miles
Office of Regional Counsel
USEPA, Region 5
77 West Jackson Boulevard
Mail Code: C-14J
Chicago, IL 60604

ARCADIS
30 West Monroe
Suite 1710
Chicago
Illinois 60603
Tel 312.332.4937
Fax 312.332.4434
www.arcadis-us.com

SEDIMENTS

Date:

March 1, 2010

Contact:

Stephen Garbaciak Jr.,

P.E.

Phone:

312.332.4937

Email:

steve.garbaciak@arcadis-us.com

Our ref:

B0064536.00670

Subject:

Plainwell No. 2 Dam Area Time-Critical Removal Action Traffic Control Plan (Rev. 1) Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site

Dear Mr. Ribordy, Ms. Kirby-Miles and Mr. Karl:

On behalf of the Kalamazoo River Study Group (KRSG), please find enclosed the Traffic Control Plan (Rev. 1) for the Plainwell No. 2 Dam Area Time-Critical Removal Action Project. The original version of the Traffic Control Plan was submitted to the United States Environmental Protection Agency (USEPA) on July 15, 2009. It has been revised to incorporate updated staging area locations, to update the contact details for the USEPA On-Scene Coordinator, and to reflect the recent merger of the Michigan Department of Environmental Quality (MDEQ) and Michigan Department of Natural Resources (MDNR) into the newly formed Michigan Department of Natural Resources and Environment (MDNRE).

This hard copy contains a CD with a PDF version of the entire document. Additional copies are being sent as presented in the cc list below.

Sincerely,

ARCADIS

Stephen Garbaciak Jr, P.E

Vice President

Mr. Ribordy, Ms. Kirby-Miles, and Mr. Karl March 1, 2010

Copies (w/enclosures):

Paul Bucholtz, MDNRE
Sharon Hanshue, MDNRE
Samuel Borries, USEPA
Todd Goeks, NOAA
Lisa Williams, USFWS
Jeff Keiser, CH2M HILL
Garry Griffith, P.E., Georgia-Pacific, LLC
L. Chase Fortenberry, P.G., Georgia-Pacific, LLC
Mark Brown, Ph.D., Waterviews, LLC
J. Michael Davis, Esq., Georgia-Pacific, LLC



Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site

Plainwell No. 2 Dam Area Time-Critical Removal Action Traffic Control Plan (Rev. 1)

Kalamazoo River Study Group

March 2010









Allied Paper, Inc./Portage Creek/ Kalamazoo River Superfund Site

Plainwell No. 2 Dam Area Time-Critical Removal Action

Traffic Control Plan (Rev. 1)

Georgia-Pacific LLC

March 2010

Stephen Garbaciak Jr., P.E.

Vice Presiden

Traffic Control Plan (Rev. 1)

Allied Paper, Inc./Portage Creek/ Kalamazoo River Superfund Site

Plainwell No. 2 Dam Area Time-Critical Removal Action

Prepared for:

Kalamazoo River Study Group

Prepared by: ARCADIS 10559 Citation Drive Suite 100 Brighton Michigan 48116 Tel 810.229.8594 Fax 810.229.8837

Our Ref.:

B0064536.00670

Date:

March 1, 2010

This document is intended only for the use of the individual or entity for which it was prepared and may contain information that is privileged, confidential and exempt from disclosure under applicable law. Any dissemination, distribution or copying of this document is strictly prohibited.

ARCADIS Table of Contents

1.	Introdu	ıction		1-1
	1.1	Backgı	round	1-1
	1.2	Purpos	se .	1-2
2.	Plainw Activit		2 Dam Area TCRA Overview—Transportation-Rela	ated 2-1
	2.1	Charac	cterization of Materials to be Disposed	2-2
	2.2	Offsite	Land Disposal Facilities	2-2
3.	Transp	ortatio	n of Soils and Sediments	3-1
4.	Traffic	Contro	l Procedures	4-1
	4.1	Transp	portation Routes	4-1
5.	Shipm	ent Doo	cumentation	5-1
	5.1	Hazard	dous Waste Shipments	5-1
	5.2	Non-H	azardous Waste Shipments	5-1
6.	Health	and Sa	fety Procedures	6-1
7.	Roles	and Res	sponsibilities	7-1
	7.1	ARCA	DIS Personnel	7-2
		7.1.1	Project Coordinator/Design Engineer	7-2
		7.1.2	Health and Safety Manager	7-3
		7.1.3	Traffic Supervisor	7-3
	7.2	Transp	porters	7-4
8.	Emerg	ency C	ontacts	8-1
9.	Contin	gency l	Plan	9-1
	9.1 Primary and Alternate Routes		9-1	
	9.2	Contaminated Soil/Sediment Spills		9-1
		9.2.1	Oil (Fuel, Diesel Fuel, and/or Hydraulic Fluid) Spills	9-3
10.	Refere	nces		10-1

g:\common\64524\10 final reports and presentations\2009 plainwell no. 2 dam traffic control plan\2010 plainwell no. 2 dam traffic control plan revision 1\plainwell no. 2 dam traffic control plan revision 1_022410.doc Created by: DA/ES 2/26/2010 Project Number: B0064536.00676

ARCADIS Table of Contents

Tables

Table 7-1 – Key Personnel	7-1
Table 8-1 – Emergency Contacts	8-1

Figures

Figure 1-1	Project Location Map
Figure 2-1	Proposed Access Roads and Staging Areas
Figure 4-1	Access Route and Directions to C&C Landfill
Figure 4-2	Access Route and Directions to Ottawa County Farms Landfill
Figure 4-3	Access Route and Directions to Wayne Disposal

Appendices

Appendix A	Example Hazardous Waste Manifest
Appendix B	Example Non-Hazardous Waste Manifest

ii

ARCADIS

Acronyms and Abbreviations

Acronyms and Abbreviations

ANSI American National Standards Institute

dBA A-weighted decibels

EQ Environmental Quality Company
HAZWOPER Hazardous Materials Site Workers

HSM Health and Safety Manager
HSP Health and Safety Plan

KRSG Kalamazoo River Study Group

MDEQ Michigan Department of Environmental Quality
MDNR Michigan Department of Natural Resources

MDNRE Michigan Department of Natural Resources and Environment

mg/kg milligrams per kilogram
M-89 Michigan State Route 89

mph miles per hour

NRR Noise Reduction Rating
OSC On-Scene Coordinator
PCBs polychlorinated biphenyls

PEAS Pollution Emergency Alerting System

PID photoionization detector

PPE personal protective equipment

PVC polyvinyl chloride
TCP Traffic Control Plan

TCRA Time-Critical Removal Action
TSCA Toxic Substances Control Act
USDOT Department of Transportation

USDOT-FHWA United States Department of Transportation - Federal Highway

Administration

USEPA United States Environmental Protection Agency

iii

Plainwell No. 2 Dam Area Time-Critical Removal Action Traffic Control Plan (Rev. 1)

1. Introduction

1.1 Background

On February 21, 2007 the Kalamazoo River Study Group, or KRSG, voluntarily entered into an Administrative Settlement Agreement and Order on Consent (AOC) with the U.S. Environmental Protection Agency (USEPA). This agreement, which described a series of supplemental remedial investigations and feasibility studies (SRIs/FSs) to be carried out at the Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site (Site or Superfund Site), is referred to as the SRI/FS AOC (Comprehensive Environmental Response, Compensation, and Liability Act [CERCLA] Docket No. V-W-07-C-864). The SRI/FS work conducted to date has been focused in Area 1 of the Site – defined as the reach of the Kalamazoo River between Morrow Dam and the Plainwell Dam and a stretch of Portage Creek (see Figure 1-1) – as described in the USEPA-approved Supplemental Remedial Investigation/Feasibility Study Work Plan – Morrow Dam to Plainwell Dam (Area 1 SRI/FS Work Plan; ARCADIS BBL 2007a).

After reviewing the results of sampling and investigation work in the Plainwell No. 2 Dam Area completed pursuant to the Area 1 SRI/FS Work Plan (ARCADIS BBL 2007a), USEPA determined that a Time-Critical Removal Action (TCRA) was necessary in the Plainwell No. 2 Dam Area to address potential sources of polychlorinated biphenyls (PCBs) to the river. In June 2009, USEPA and Georgia-Pacific signed an AOC that formalized the agreement to complete a TCRA (Plainwell No. 2 TCRA AOC; CERCLA Docket No. V-W-09-C-925). Locations targeted for excavation in the Plainwell No. 2 Dam Area include bank soils, sediments in a portion of a historical oxbow channel, and soils in a floodplain area adjacent to the oxbow.

The removal action is currently taking place in the Plainwell No. 2 Dam Area, which is located on the Kalamazoo River approximately 3.5 miles upstream of the former Plainwell Dam in the city of Plainwell and Gun Plain Township, Allegan County. It is roughly bounded on its upstream (or southeastern) end by an abandoned railroad, and on its downstream (or northwestern) end by the left diversion structure of the Plainwell No. 2 Dam (Figure 1-1). As part of the Plainwell No. 2 Dam Area TCRA activities, during 2009 and 2010 targeted bank soils, sediments, and floodplain soils are being removed and transported to one of two offsite licensed disposal facilities, depending on landfill capacity. Additional disposal facilities may also be identified for use during the 2010 construction season if necessary. This Traffic Control Plan (TCP), which includes details on traffic routes, project area entrances, traffic control measures, safety procedures, communication plans, and manifesting procedures implemented during the removal action, will be amended if disposal facilities other than those currently identified are to be used. In addition, if a change in disposal facility is necessary, Georgia-Pacific will provide

Plainwell No. 2 Dam Area Time-Critical Removal Action Traffic Control Plan (Rev. 1)

USEPA a minimum of 30 days advance notification, in accordance with Section VIII, Paragraph 14.c.iv of the Plainwell No. 2 TCRA AOC.

This revision to the July 2009 version of the TCP was developed to document changes to the staging areas that will be used during the 2010 construction season (see Figure 2-1), include a secondary truck access route that may be used during the 2010 construction season (Figures 4-1, 4-2, and 4-3), update the name and contact information for USEPA's On-Scene Coordinator (see Tables 7-1 and 8-1), and reflect the fact that the Michigan Departments of Environmental Quality and Natural Resources (MDEQ and MDNR, respectively) merged on January 17, 2010 into the new Michigan Department of Natural Resources and Environment (MDNRE).

1.2 Purpose

There is significant truck traffic associated with the implementation of the removal action. Equipment includes 20-ton double-axle dump trucks and/or tractor trailers, construction worker vehicles, delivery vehicles, and visitor vehicles. During removal activities, an average of 10 to 12 (up to a maximum of 25) truck loads of dewatered soil and sediment material are hauled daily from the project area to the offsite licensed disposal facilities. A combination of off-road trucks and equipment and over-the-road haul vehicles are used to carry out the various transport-related tasks. The off-road vehicles travel only within the active construction site, while the over-the-road trucks are used to haul materials on public roads.

An assessment of existing road conditions was performed prior to start of construction. Documentation of this assessment is maintained in the project files located at the ARCADIS office in Brighton, Michigan. Dry runs were performed as necessary on all primary and alternate routes between the project area and the offsite disposal facilities to identify potential problem areas or areas of significant traffic congestion.

Construction traffic is directed to travel to and from the project area along established truck routes. These routes provide efficient travel routes for construction vehicles while minimizing the impact on local traffic. Warning signs and traffic controls are employed when necessary (consistent with the 2003 U.S. Department of Transportation - Federal Highway Administration [USDOT-FHWA] *Manual on Uniform Traffic Control Devices* and local/state regulations) to alert local traffic to trucks entering and leaving the project area via local roads. Also, local law enforcement agencies and highway departments were consulted and notified of the construction schedule and designated truck routes prior to the start of the 2009 construction season. During peak periods, the timing of construction traffic can be adjusted to avoid

Plainwell No. 2 Dam Area Time-Critical Removal Action Traffic Control Plan (Rev. 1)

increased congestion and conflicts with local traffic patterns. There are no lane closures to create exclusive truck traffic lanes.

The following sections of this TCP provide details on the potential impacts and mitigation approach. The goals of implementing the measures described in this TCP are to prevent injuries to workers, passengers, and pedestrians; damage to motor vehicles and/or other equipment; and damage to third party property.

Plainwell No. 2 Dam Area Time-Critical Removal Action Traffic Control Plan (Rev. 1)

2. Plainwell No. 2 Dam Area TCRA Overview—Transportation-Related Activities

Specific aspects of the design of the Plainwell No. 2 Dam Area TCRA related to the development of this TCP are briefly summarized in this section. A comprehensive description of the project is provided in the *Plainwell No. 2 Dam Area Time-Critical Removal Action Design Report* (ARCADIS 2009a).

Temporary access roads have been and will be constructed to allow access to the work areas along the banks of the Kalamazoo River, and to the three staging areas established to manage material storage, processing, and transport. Figure 2-1 presents a plan view of locations for access roads, staging areas, and project support areas – this figure was updated for this revision to the TCP to reflect the modified locations of the staging areas on the southern side of the river.

Aggregate materials, such as gravel, sand, and crushed concrete as well as construction materials such as geotextile fabric are used to construct temporary access roads and staging areas. Topsoil and river run rock are used for restoration of excavated areas. These materials are imported from off site borrow sources or material suppliers and transported to the site using tractor trailers.

To the extent practicable, existing access points and roads are used, and new access points are added only as required and as property access agreements allow. Approximately three access points to the Kalamazoo River were deemed necessary to efficiently remove targeted material from the project area. To maximize worker safety and minimize disruption to the local community, most material hauling and construction activities are limited to daylight hours.

After excavation, most soils and sediments are drained and processed to remove excess water before they can be efficiently transported offsite for disposal. As the sediments and soils are excavated, they are loaded directly into haul trucks then transported to one of the three staging areas (Staging Area 1, 2, and 3; see Figure 2-1) so that excess water can be drained. Materials are then processed to the extent necessary to meet landfill compaction requirements and pass a Paint Filter Liquids test (see Section 3).

As shown on Figure 2-1, improvements have been/will be completed to construct gravel train haul roads and provide access to the project area from the following directions:

- 1. the southwest side of the project area, providing access from 10th Street/Douglas Avenue
- 2. the southeast side of the project area, providing access from 10th Street/Douglas Avenue

Project Number: B0064536.00676

Plainwell No. 2 Dam Area Time-Critical Removal Action Traffic Control Plan (Rev. 1)

3. the north side of the project area, providing access from Riverview Drive

2.1 Characterization of Materials to be Disposed

The materials targeted for excavation were evaluated to determine if any of the soils or sediments will have to be handled as required by the Toxic Substances Control Act (TSCA). The results of this evaluation, which are described in the Plainwell No. 2 Dam TCRA Design Report (ARCADIS 2009a), indicate that no material meets the relevant TSCA thresholds. As such, all excavated material is transported offsite and disposed of at a Subtitle D (nonhazardous) commercial landfill facility.

Other waste materials not impacted by PCBs (i.e., non-impacted soils, tree and wood debris; miscellaneous waste material) are classified as non-hazardous waste. While some of these materials have been/will be transported to and disposed of at a Subtitle D commercial landfill, some cleared vegetation has been/will be chipped and used either as temporary vegetative cover to support erosion control efforts in the project area or as a sediment/soil solidification amendment. Larger trees (9-inch diameter at breast height or larger) removed during clearing activities may be limbed and transported offsite for disposal, if they are not suitable for chipping. Alternatively, larger tree trunks and stumps derived from clean areas could be piled in a location of the project area designated for that purpose, and the area will be accessible to the MDNRE after construction is complete. To the extent possible, root wads are removed and disposed offsite.

2.2 Offsite Land Disposal Facilities

As part of the Plainwell No. 2 Dam Area TCRA activities, all waste, including excavated sediment and soil, will be transported to one of two offsite licensed disposal facilities. Additional disposal facilities also may be identified for use if necessary. A minimum of 30 days advance notification on a change in disposal facility will be provided to USEPA per Section VIII, Paragraph 14.c.iv of the Plainwell No. 2 TCRA AOC, and this TCP will be amended if additional disposal facilities are to be used.

Excavated soils and sediments from all removal areas and other non-impacted waste materials are transported to the following licensed non-hazardous waste disposal facilities:

C & C Landfill (an Allied Waste Services facility)

14800 P Drive North Marshall, MI 49068 Phone: 269.781.9742 **Ottawa County Farms Landfill**

15550 68th Avenue Coopersville, Michigan 49404 Phone: 616.837.8195

Plainwell No. 2 Dam Area Time-Critical Removal Action Traffic Control Plan (Rev. 1)

Although it is not anticipated that any materials generated during the project will need to be handled under TSCA, in the event that TCSA-regulated materials are encountered, that material will be transported to the following hazardous waste disposal facility:

Wayne Disposal (an Environmental Quality Company [EQ] facility)

49250 North I-94 Service Drive Belleville, MI 48111 Phone: 800.592.5489

Plainwell No. 2 Dam Area Time-Critical Removal Action Traffic Control Plan (Rev. 1)

3. Transportation of Soils and Sediments

Drained and solidified soils and sediments excavated from the project area are transported via tractor trailers or dump trucks to the appropriate offsite licensed disposal facility (see Section 2.2). Appropriate temporary erosion and sediment control measures (i.e., best management practices, including stabilized construction entrances and staging areas, good housekeeping practices), truck decontamination facilities, and appropriate traffic controls (i.e., keeping truck traffic on temporary access roads and off impacted soil material) are implemented to minimize the potential for tracking impacted soil and sediment materials onto public roadways.

All excavated soil and sediment designated for disposal is solidified to the extent necessary to meet landfill compaction requirements and pass a Paint Filter Liquids test (USEPA SW-846 Method 9095A) prior to being transported from the project area. If soil or sediment does not pass the Paint Filter Liquids test, the material will be further solidified and retested prior to hauling offsite. Excavated soil and sediment may be temporarily stored on staging pads in one of the project Staging Areas (see Figure 2-1) or directly loaded into tractor trailer trucks. If a staging pad is used to temporarily store soil or sediment, off-road dump trucks will be used to transfer the material to the staging area for loading and transportation offsite.

Prior to leaving the work area, all trucks are inspected and decontaminated, if necessary, and if present, impacted soil on the outside of the trucks or the tires is cleaned off manually with brushes or by using a pressure washer. Trucks containing waste material are lined and have sealed tailgates to reduce the potential of leakage of free liquids onto public road ways, and are also be covered to control fugitive dust during transport to the commercial landfill. All trucks are inspected before leaving the project area to verify that necessary placards are in place and the shipment is properly manifested. During removal activities, a maximum of 25 truck loads of dewatered soil and sediment material are hauled from the project area per day.

After delivery of the soil or sediment to the appropriate offsite disposal facility and prior to leaving the site, all trucks are inspected and decontaminated, if necessary, following the same inspection procedures used for trucks leaving the Plainwell No. 2 Dam Area TCRA area. In addition, each tractor trailer truck is inspected to verify that all soil or sediment has been emptied from the trailer.

Plainwell No. 2 Dam Area Time-Critical Removal Action Traffic Control Plan (Rev. 1)

4. Traffic Control Procedures

Routine traffic associated with the construction activities includes 20-ton double-axle dump trucks and/or tractor trailers, construction worker vehicles, delivery vehicles, and visitor vehicles. During removal activities a daily average of 10 to 12 (up to a maximum of 25) truck loads of soil and sediment material are hauled from the project area to the disposal facilities. Transportation activities are spread out to minimize, to the extent practical, impacts to local traffic. Bulk material deliveries (e.g., solidification agents, aggregate, materials, equipment) are hauled in separate delivery trucks to avoid disposal material hauling scheduling problems and to ensure proper delivery of materials when needed.

4.1 Transportation Routes

As shown on Figures 4-1, 4-2, and 4-3, construction traffic is directed to travel to and from the project areas along established truck routes. In this revised Traffic Control Plan, secondary routes have also been added to each of the above figures to provide an alternative for transportation of materials. These traffic routes provide for efficient travel for construction vehicles while minimizing the impact to local traffic. Warning signs and traffic controls may be employed (consistent with USDOT-FHWA 2003 and local/state regulations) to alert local traffic to trucks entering and leaving the project areas via local roads. Also, local law enforcement agencies and highway departments have been consulted and notified of the construction schedule and designated truck routes (see roles and responsibilities in Section 7.0). During peak periods, the timing of construction traffic may be adjusted to avoid increased congestion and conflicts with local traffic patterns. During the 2009 season, transportation of materials did not impede existing traffic flow, and no project-related impediments to traffic flow are anticipated during the 2010 season (i.e., there will be no lane closures to create exclusive truck traffic lanes). Prior to commencing hauling operations, field crews conducted a detailed assessment and documentation of road conditions. In addition, dry runs were performed prior to hauling on all primary and alternate routes between the project area and the offsite disposal facilities to identify potential problem areas or areas of significant traffic congestion.

All trucks transporting waste offsite are staged within the work area to avoid impacts on public roads. Project-related traffic is coordinated in a manner such that an excessive number of trucks are not be operating at any given time to minimize truck traffic on surrounding surface streets and dust generation in the project area. The maximum speed limit for all vehicles within the project area is 10 miles per hour (mph).

Figures 4-1 and 4-2 show the access route and directions from the project area to C & C Landfill and Ottawa County Farms Landfill, respectively. Although increased traffic cannot be

Plainwell No. 2 Dam Area Time-Critical Removal Action Traffic Control Plan (Rev. 1)

avoided, most material hauling and construction activities are limited to daylight hours and as necessary, flagmen and/or signage are employed to manage traffic and alert non-project-related drivers of new travel patterns.

Figure 4-3 shows the proposed access route and directions from the project area to the Wayne County disposal facility, which is the closest facility that accepts waste managed under TSCA. As explained in Section 2.1, it is not anticipated that any project-related materials will need to be handled according to TSCA, however these directions are included in the event that transportation to the Wayne County facility is necessary.

All applicable local, city, and state ordnances are observed, including Michigan Motor Vehicle Code Act 300 of 1949, which outlines traffic rules for right-of-way, traffic signals, speed restrictions; size, weight, load, and noise restrictions; registration fees; and inspection of vehicles.

Plainwell No. 2 Dam Area Time-Critical Removal Action Traffic Control Plan (Rev. 1)

5. Shipment Documentation

5.1 Hazardous Waste Shipments

Although TSCA-regulated materials are not expected to be handled during this project, if soils or sediments with PCB concentrations of 50 mg/kg or greater are encountered, they will be processed in accordance with TSCA and Part 147, PCB Compounds, of the (Michigan) Natural Resources and Environmental Protection Action, 1994 PA 451, as amended. TSCA shipments will be documented with a Uniform Hazardous Waste Manifest (Form 8700-22) and if necessary, the Continuation Sheet (Form 8700-22A) for interstate and intrastate transportation (MDEQ 2006). In the event that TCSA-regulated material is found at the site, the material will be transported to the Wayne Disposal licensed hazardous waste disposal facility in Belleville, Michigan. The manifest will identify Georgia-Pacific LLC as the generator and will be signed by a representative of Georgia-Pacific. An example of the hazardous waste manifest is provided in Appendix A. Shipping information on each manifest will include:

- Date of shipment
- Quantity of Special Waste shipped
- United States Department of Transportation (USDOT) prescribed shipping name of the material
- USDOT identification number of the material
- USDOT Hazardous Class

All manifests will be submitted to the MDNRE with copies to the USEPA. Copies of the manifest will be maintained at the ARCADIS project trailer.

5.2 Non-Hazardous Waste Shipments

All non-hazardous wastes are transported and disposed at the C & C Landfill in Marshall, Michigan or the Ottawa County Landfill in Coopersville, Michigan. Documentation for all non-hazardous waste is recorded on non-hazardous waste manifests (an example of which is given in Appendix B). These and all shipping documentation (bills of lading) are maintained at the ARCADIS project trailer. All non-hazardous waste manifests are submitted to MDNRE with copies to USEPA. At a minimum, the following is recorded for each shipment:

Plainwell No. 2 Dam Area Time-Critical Removal Action Traffic Control Plan (Rev. 1)

- Date of Shipment
- Quantity of waste material
- Description of waste material
- Disposal facility name and address

Plainwell No. 2 Dam Area Time-Critical Removal Action Traffic Control Plan (Rev. 1)

6. Health and Safety Procedures

Health and safety procedures are presented in the *Multi-Area Health and Safety Plan for the Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site* (Multi-Area HSP; ARCADIS BBL 2007b) and its associated addenda, and all project personnel are required to be familiar with its contents. Addendum 5 of the Multi-Area HSP (ARCADIS 2009b) contains information specifically pertaining to the Plainwell No. 2 Dam Area TCRA. The objective of the Multi-Area HSP and addenda is to provide a mechanism for establishing safe working practices while conducting the Plainwell No. 2 Dam Area TCRA activities. The safety organization, procedures, and protective equipment have been established based on an analysis of potential physical, chemical, and biological hazards. Specific hazard control methodologies have been evaluated and selected to minimize the potential of injury, illness, or other hazardous incident. Section 4.0 of the Multi-Area HSP presents General Safety Practices and Section 5.0 presents personal protective equipment (PPE) requirements. Section 3.0 of Addendum 5 of the Multi-Area HSP discusses project hazards and controls. A copy of the Multi-Area HSP and its associated addenda is available at the ARCADIS project trailer.



Plainwell No. 2 Dam Area Time-Critical Removal Action Traffic Control Plan (Rev. 1)

7. Roles and Responsibilities

The roles of ARCADIS personnel and transporters are outlined in Section 7.1, and Table 7-1 (below) includes a summary of key project personnel and contacts.

Table 7-1 – Key Personnel

Table 1-1 - Key Fersonnel				
Role	Name	Address/Telephone No.		
ARCADIS Personnel				
Project Coordinator/ Design Engineer	Stephen Garbaciak Jr., P.E.	30 W. Monroe, Suite 1710 Chicago, IL 60603 Phone: 312.332.4937 ext. 12 Cell: 708.203.0566		
Health and Safety Manager	Charles P. Webster, CSP	6723 Towpath Road P.O. Box 66 Syracuse, NY 13214 Phone: 315.671.9297 Cell: 315.247.5971		
Traffic Supervisor	Michael Kohagen	On-site Cell: 248.808.3701		
Georgia-Pacific Personnel				
Technical Lead	Garry Griffith, P.E.	951 County Street Milan, MI 48160 Phone: 734.439.1205 Cell:734.735.0780		
USEPA Region 5 Personnel				
On-Scene Coordinator	Sam Borries	77 W. Jackson Blvd (SE-5J) Chicago, IL 60604 Phone: 312.353.8360 Cell: 312.802.5336		
MDNRE Personnel				
MDNRE Project Manager	Paul T. Bucholtz	Remediation Division 525 W. Allegan St., 3rd Floor South Lansing, MI 48909 Phone: 517.373.8174 Cell: 517.214.6777		



Plainwell No. 2 Dam Area Time-Critical Removal Action Traffic Control Plan (Rev. 1)

7-2

Role	Name	Address/Telephone No.	
Michigan Department of Transportation			
Bureau of Transportation Planning – Statewide Transportation Planning Division	Denise Jackson, Administrator	425 West Ottawa P.O. Box 30050 Lansing, MI 48909 Phone: 517.335.2962	
Michigan State Police			
Michigan State Police 1st District Headquarters	Captain Dan Smith	7119 N. Canal Road Lansing, MI 48913 Phone: 517.322.1912	
Michigan State Police 2nd District Headquarters	Captain Harold Love	42145 W. Seven Mile Road Northville, MI 48167 Phone: 248.380.1020	
Michigan State Police 5th District Headquarters	Captain Greg Krusinga	108 W. Michigan Ave. Paw Paw, MI 49079 Phone: 269.657.6081	
City of Plainwell			
Public Safety	Bill Bomar Director	Phone: 269.685.9858 Police: 141 N. Main Street Plainwell, MI 49080 Fire: 115 West Bridge Street Plainwell, MI 49080	

7.1 ARCADIS Personnel

7.1.1 Project Coordinator/Design Engineer

The Design Engineer is responsible for verifying that Plainwell No. 2 Dam Area TCRA project activities are completed in accordance with the requirements of this TCP. The Design Engineer is responsible for confirming that the Traffic Supervisor has the equipment, materials, and qualified personnel to fully implement the TCP requirements. It is also the responsibility of the Design Engineer to perform the following duties:

Plainwell No. 2 Dam Area Time-Critical Removal Action Traffic Control Plan (Rev. 1)

- Consult with the Traffic Supervisor on traffic-related issues
- Verify that all incidents and near-misses are thoroughly investigated and reported to Georgia-Pacific within 24 hours
- Approve, in writing, addenda or modifications to this TCP
- Suspend work or modify work practices, as necessary, for personal safety, protection of property, and regulatory compliance

7.1.2 Health and Safety Manager

The Health and Safety Manager (HSM) is responsible for providing technical support to the Design Engineer and Traffic Supervisor. Inquiries regarding ARCADIS health and safety procedures, project procedures, and other technical or regulatory issues will be addressed to this individual. The HSM is responsible for investigating incidents and near-misses, assisting in developing corrective action plans, and verifying corrective actions.

7.1.3 Traffic Supervisor

The Traffic Supervisor is responsible for implementing this TCP and communicating requirements to project personnel. The Traffic Supervisor is also responsible for discussing issues associated with the established work plan or procedures and impacts related to conditions within the project area so that those changes may be addressed as appropriate in this TCP. Other responsibilities are to perform the following duties:

- Confirm all soil/material on the outside of the tractor trailer trucks or the tires has been cleaned (if necessary) prior to leaving the project area
- Maintain documentation for all waste material hauled offsite
- Consult with the HSM on traffic health and safety issues
- Post the telephone numbers of local public representatives in the project trailer and notify those officials (as appropriate) of the nature of the traffic-related project operations
- Investigate and report any traffic incidents and near-misses to the HSM

Plainwell No. 2 Dam Area Time-Critical Removal Action Traffic Control Plan (Rev. 1)

- Verify that all project personnel have completed applicable transportation training
- Conduct traffic orientation training and meetings
- Review transportation activities with respect to compliance with this TCP
- Maintain required TCP documents and records

7.2 Transporters

Transportation of excavated sediment and soil is conducted by Terra Contracting, Inc. All truck drivers transporting sediment and soil offsite are fully licensed and insured and in compliance with USDOT requirements.



Plainwell No. 2 Dam Area Time-Critical Removal Action Traffic Control Plan (Rev. 1)

8. Emergency Contacts

Table 8-1 presents specific emergency contact information.

<u>Table 8-1 – Emergency Contacts</u>

Agency	Telephone No.		
<u> </u>	Total terms		
Emergency Services			
Fire	911 (if possible, indicate nearest highway marker or exit name or number)		
Police	911 (if possible, indicate nearest highway marker or exit name or number)		
Ambulance	911 (if possible, indicate nearest highway marker or exit name or number)		
Hazardous Waste Disposal Facility			
Wayne Disposal (EQ 24-hour Dispatch)	Phone: 800.839.3975		
Regulatory Contacts			
Regional Duty Officer, Emergency Response Branch, Region 5	Phone: 312.353.2318		
Pollution Emergency Alerting System (PEAS)	Phone: 800.292.4706 (within Michigan) Phone: 517.373.7660 (outside of Michigan)		
USEPA OSC: Sam Borries	Phone: 312.353.8360 Cell: 312.802.5336		
National Response Center	800.424.8802		
ARCADIS Staff			
ARCADIS Plainwell No. 2 Dam Area TCRA Project Coordinator: Stephen Garbaciak Jr., P.E.	Phone: 312.332.4937 ext. 12 Cell: 708.203.0566		
ARCADIS Project Manager: Matt Bowman	Phone: 810.225.1920 Cell: 989.277.4852		
ARCADIS Site Supervisor: EJ Suardini	On-site Cell: 734.276.2566		
ARCADIS Health and Safety Manager (HSM): Charles P. Webster, CSP	Phone: 315.671.9297 Cell: 315.247.5971		

Plainwell No. 2 Dam Area Time-Critical Removal Action Traffic Control Plan (Rev. 1)

9. Contingency Plan

9.1 Primary and Alternate Routes

If the primary transport route to one of the disposal facilities is unavailable or becomes excessively congested (i.e., due to outside construction or temporary road/lane closures) an alternative route will be used. ARCADIS will notify the USEPA, MDNRE, and the City of Plainwell representatives if an alternate route is used or if truck traffic is rerouted. In addition, due to unforeseen circumstances such as extended road closures or road construction activities, access routes may need to be modified during construction. If at any time the access routes require modifications, ARCADIS will discuss the modifications with the USEPA, MDNRE, and the City of Plainwell prior to implementation. Associated modifications to this TCP will be made as necessary in these situations.

Significant hazards during transportation include traveling on congested surface streets, travel through significantly populated areas, and sharp turning radii at some of the surface street intersections. To minimize these hazards, all efforts are made to conduct transportation activities during regular business hours, transporters are aware of all local traffic patterns, and if necessary and where possible, temporary traffic lights or other traffic control measures are placed in strategic locations to improve the flow of traffic and assist transporters in making sharp turns.

9.2 Contaminated Soil/Sediment Spills

If a spill of impacted material occurs, the steps to be taken include:

- The Site Supervisor will be notified, who will contact the Project Coordinator and Project Manager (identified in Table 8-1).
- Workers responding to a spill shall be trained Hazardous Materials Site Workers (HAZWOPER) wearing appropriate PPE. Section 5 of the Multi-Area HSP (ARCADIS BBL 2007b) presents a description of the PPE requirements. Varying levels of protection may be required depending on the levels of potential contamination and the degree of physical hazard. At a minimum, if airborne PCBs are not present at levels of concern during spill response activities, Modified Level D PPE must be used when the activities present an increased potential for skin contact with contaminated materials. Modified Level D consists of the following:
 - Work clothing as prescribed by weather conditions

Plainwell No. 2 Dam Area Time-Critical Removal Action Traffic Control Plan (Rev. 1)

- American National Standards Institute (ANSI) Z41-approved protective footwear (must be at least 6 inches high up the ankle)
- Safety glasses (as necessary) with side shields or goggles, meeting ANSI Z87
- Hard hat, meeting ANSI Z89, when falling object hazards are potentially present
- Hearing protection (if noise levels exceed 85 A-weighted decibels [dBA], then hearing protection with a USEPA Noise Reduction Rating (NRR) of at least 20 dBA must be used)
- Latex/polyvinyl chloride (PVC) overboots when contact with PCB-impacted media is anticipated
- Face shield in addition to safety glasses or goggles when projectiles or splash hazards exist
- Nitrile outer gloves worn over nitrile surgical gloves
- Tyvek[®] coveralls (polyethylene-coated Tyvek[®] suits for handling liquids) when body contact with PCB-impacted media is anticipated
- Personal floatation device if working on or near the water
- Document the location of the spill in the Site Log book.
- Determine whether or not the contaminated material is entering a waterway (i.e., river, stream, storm sewer inlet, etc.). If it is, block the flow of material.
- Remove the contaminated material as soon as possible and containerize. Depending on the size of the spill, brooms and shovels or larger equipment such as excavators and loaders may be required. If possible, the material will be loaded into the truck from which the spill originated.
- If the spill cannot be removed immediately, mark the area where the spill occurred with chalk, degradable spray paint, or caution tape. Secure the spill site from entry by unauthorized personnel by roping off the area and posting warning signs.
- If the spill occurred on an impervious surface, cover the spill area with polyethylene or
 plastic tarpaulin or moisten with a fine mist to prevent the material from becoming airborne
 unless it can be removed immediately. Remove bulk material and place into a container.
 Sweep area with a broom and place collected material into a container.
- If possible, dispose of the spilled material at the appropriate offsite disposal facility with the material being transported for disposal.

Plainwell No. 2 Dam Area Time-Critical Removal Action Traffic Control Plan (Rev. 1)

- Decontaminate any tools or equipment used in the cleanup.
- 9.2.1 Oil (Fuel, Diesel Fuel, and/or Hydraulic Fluid) Spills

If a spill of oil exceeding 10 gallons occurs, the following steps will be taken:

- The Site Supervisor will be notified who will contact the Project Coordinator and Project Manager (identified in Table 8-1).
- Workers responding to a spill shall be HAZWOPER trained and wear appropriate PPE. Refer to the Multi-Area HSP (ARCADIS BBL 2007b) for a description of the PPE requirements. Section 5 of the Multi-Area HSP (ARCADIS BBL 2007b) presents a description of the PPE requirements. Varying levels of protection may be required depending on the levels of potential contamination and the degree of physical hazard. At a minimum, if airborne dust is not present at levels of concern during spill response activities, Modified Level D PPE (as described in Section 9.2) must be used when the activities present an increased potential for skin contact with contaminated materials.
- If determined necessary by the Project Coordinator, the Project Coordinator will notify the regulatory agencies listed in Table 8-1.
- Document the location of the spill in the Site Log book.
- Perform a visual assessment of the situation and determine preliminary response actions, and alert facility personnel in the area of the spill or release. The Site Supervisor will then issue evacuation orders, if evacuation is warranted. Attempts to control or stop the release will be made by the HAZWOPER-trained responders, who will also attempt to minimize the spread of contamination onto the ground surface or water.
- Determine whether or not the fuel is entering a waterway (i.e., river, stream, storm sewer inlet, etc.). If it is, block the flow of free product.
- After the spill or release has been controlled and contained, the spill will be cleaned up. All
 spilled materials and response equipment will be properly containerized and disposed of
 following resolution of the spill or release incident.

Plainwell No. 2 Dam Area Time-Critical Removal Action Traffic Control Plan (Rev. 1)

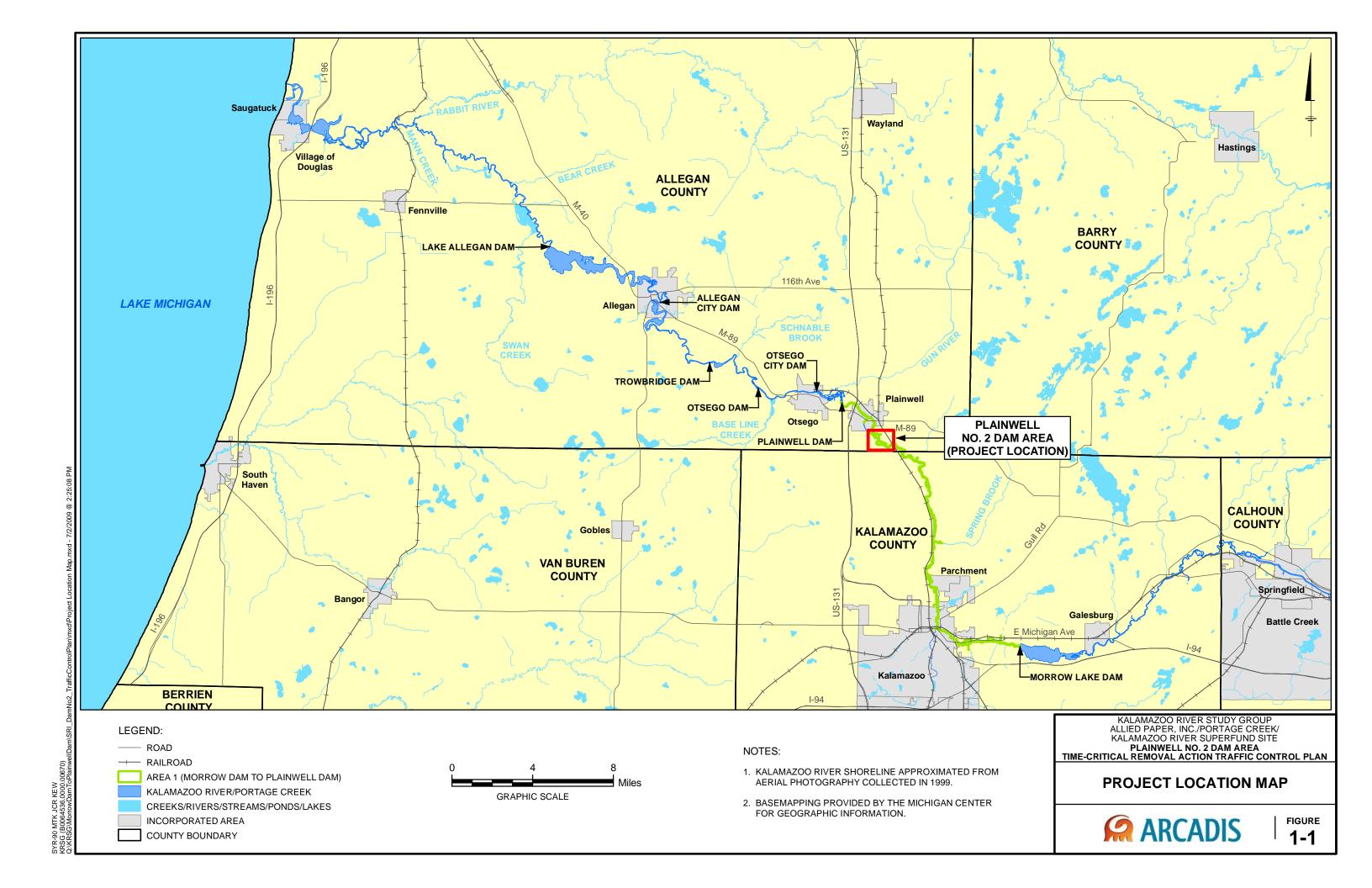
- If the spill cannot be removed immediately, mark the area where the spill occurred with degradable spray paint and caution tape. Secure the spill site from entry by unauthorized personnel by roping off the area and posting warning signs.
- If the spill occurred on a pervious surface, remove soil until visual observations and
 photoionization detector (PID) readings indicate there is no contamination. Contaminated
 soil should be containerized and disposed of at an approved disposal facility in accordance
 with all applicable state and federal regulations.
- If the spill occurred on an impervious surface, surround the spill with a dike using
 absorbent material to prevent further spreading. Use absorbent material to remove visible
 traces of fuel. Place contaminated absorbent material in a sealable, leak-proof container
 and label container identifying the fuel for disposal.
- Dispose of the spilled material in properly labeled containers for offsite transport to an approved disposal facility in accordance with all applicable state and federal regulations.
- Sampling and analyses of soil samples may be necessary.

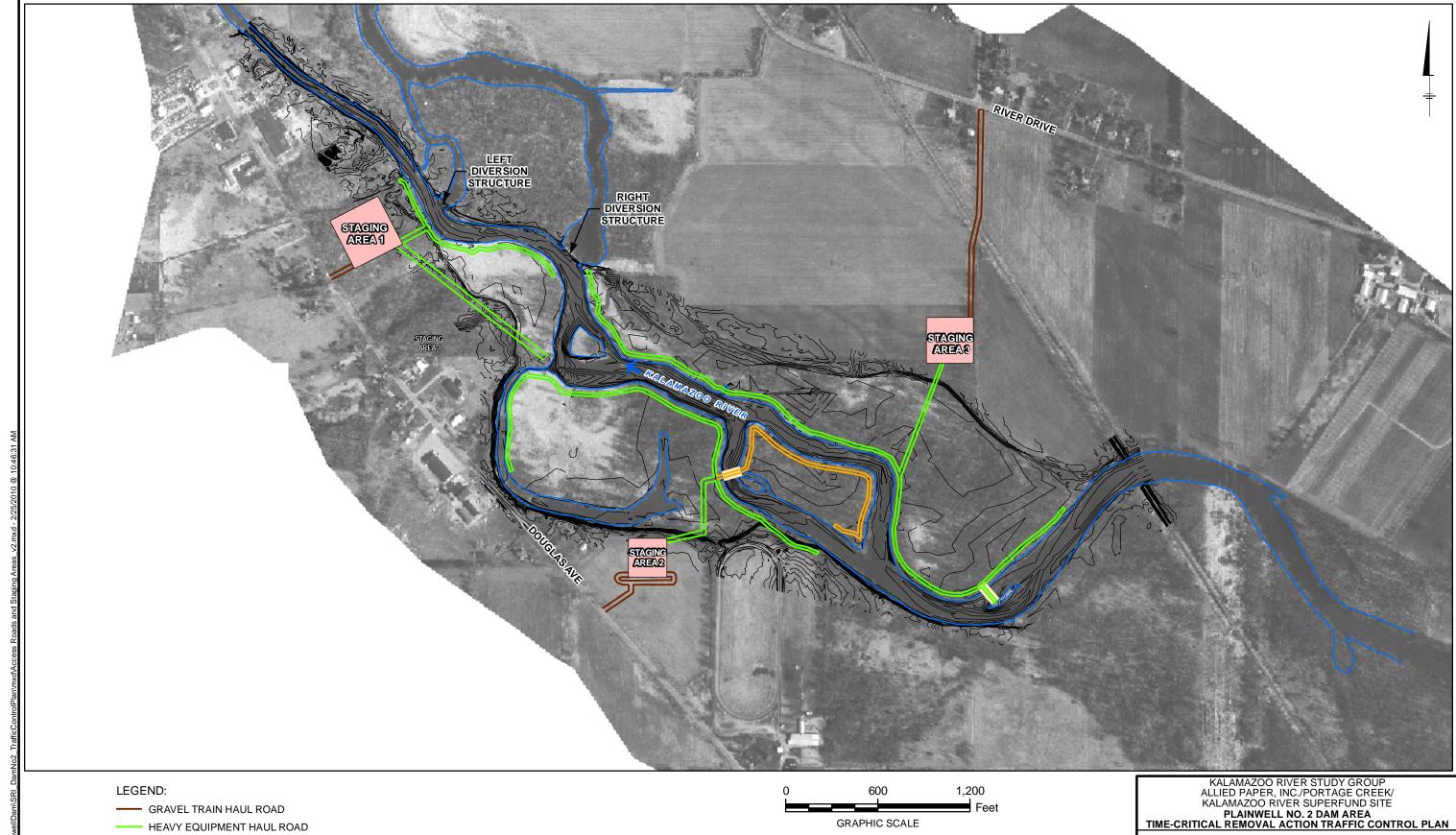
Plainwell No. 2 Dam Area Time-Critical Removal Action Traffic Control Plan (Rev. 1)

10. References

- ARCADIS 2009a. *Plainwell No. 2 Dam Area Time-Critical Removal Action Final Design Report.* July 2009.
- ARCADIS. 2009b. Addendum 5 to the Multi-Area Health and Safety Plan for the Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site. June 2009.
- ARCADIS BBL. 2007a. Supplemental Remedial Investigation/Feasibility Study Work Plan Morrow Dam to Plainwell. (Area 1 SRI/FS Work Plan). February 2007.
- ARCADIS BBL. 2007b. *Multi-Area Health and Safety Plan for the Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site* (Multi-Area HSP). May 2007.
- MDEQ. 2006 Operation Memorandum 147-1, Manifesting Polychlorinated Biphenyls (PCB) Waste, September 1, 2006.
- USDOT-FHWA. 2003. *Manual on Uniform Traffic Control Devices for Streets and Highways*. 2003 Edition, with Revisions 1 and 2, dated December 2007. Accessed online at http://mutcd.fhwa.dot.gov/kno 2003r1r2.htm

Figures





HEAVY EQUIPMENT HAUL ROAD

LIGHT DUTY EQUIPMENT HAUL ROAD

TOPOGRAPHY/BATHYMETRY CONTOUR - 2 FT INTERVAL

MEDIAN WATER LINE (APPROXIMATE)

STAGING AREA

TEMPORARY BRIDGE



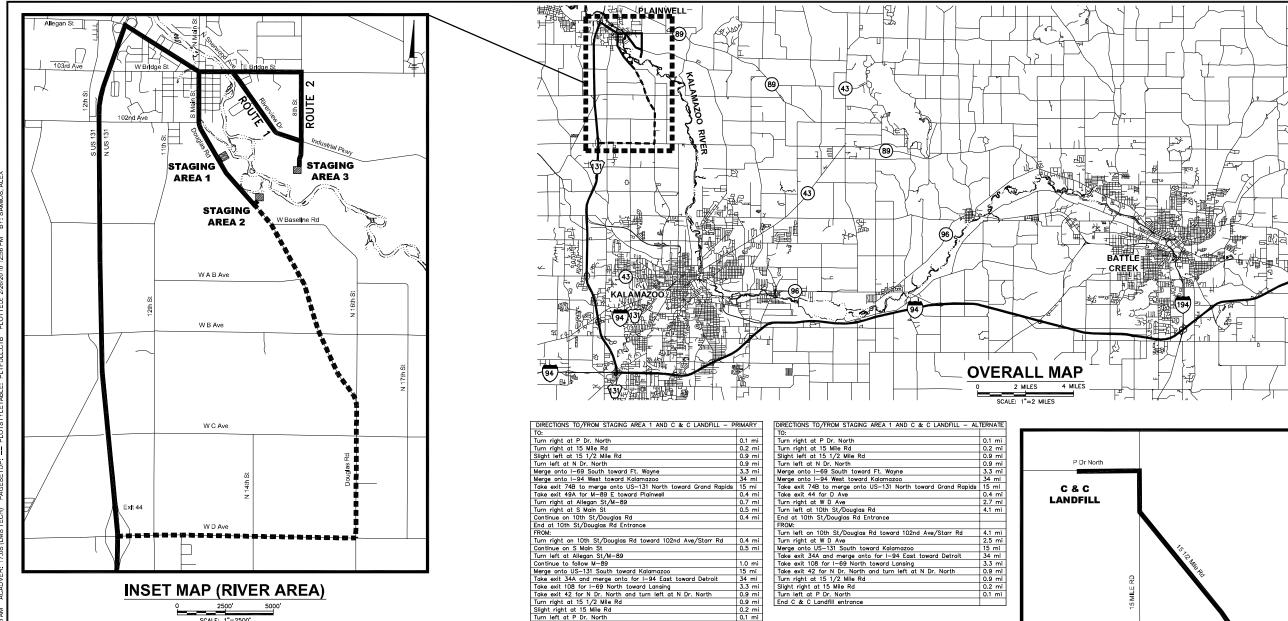
NOTES:

- 1. REVISED IN FEBRUARY 2010 TO INCLUDE UPDATES TO STAGING AREA LOCATIONS.
- 2. AGGREGATE MATERIAL USED TO CONSTRUCT HAUL ROADS ON THE NORTH SIDE OF THE RIVER IN 2009 WILL BE REMOVED AND RE-USED TO CONSTRUCT HAUL ROADS ON THE SOUTH SIDE OF THE RIVER IN 2010.

ACCESS ROADS AND STAGING AREAS



FIGURE 2-1



INSET MAP (RIVER AREA)

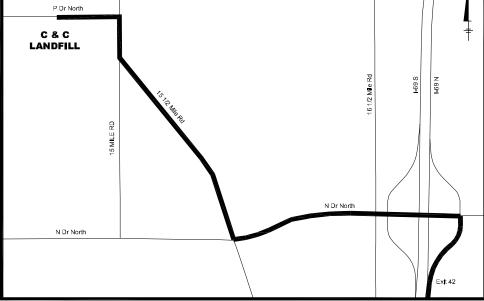
ROUTE 1 DIRECTIONS TO/FROM STAGING AREA 3 AND C & C LAI	NDFILL
TO:	
Turn right at P Dr. North	0.1 m
Turn right at 15 Mile Rd	0.2 n
Slight left at 15 1/2 Mile Rd	0.9 n
Turn left at N Dr. North	0.9 n
Merge onto I-69 South toward Ft. Wayne	3.3 n
Merge onto I-94 West toward Kalamazoo	34 m
Take exit 74B to merge onto US-131 North toward Grand Rapids	15 m
Take exit 49A for M-89 E toward Plainwell	0.4 n
Turn right at Allegan St/M-89	
Continue to follow Allegan St/M-89	1.1 m
Turn right at S Sherwood Ave	0.3 r
Continue on Riverview Rd/Riverview Dr	0.7 n
End at Riverview Rd/Riverview Dr Entrance	
FROM:	
Turn left on Riverview Rd/Riverview Dr toward Charles St	0.7 n
Continue on S Sherwood Ave	0.3 n
Turn left at E Bridge St/M-89	
Continue to follow E Bridge St/M-89	1.3 m
Merge onto US-131 South toward Kalamazoo	15 m
Take exit 34A and merge onto for I-94 East toward Detroit	34 m
Take exit 108 for I-69 North toward Lansing	3.3 r
Take exit 42 for N Dr. North and turn left at N Dr. North	0.9 r
Turn right at 15 1/2 Mile Rd	0.9 r
Slight right at 15 Mile Rd	0.2 r
Turn left at P Dr. North	0.1 n
End C & C Landfill entrance	

LL	ROUTE 2 DIRECTIONS TO/FROM STAGING AREA 3 AND C & C LAN	NDFILL
	TO:	
1 mi	Turn right at P Dr. North	0.1 mi
2 mi	Turn right at 15 Mile Rd	0.2 mi
9 mi	Slight left at 15 1/2 Mile Rd	0.9 m
9 mi	Turn left at N Dr. North	0.9 mi
3 mi	Merge onto I-69 South toward Ft. Wayne	3.3 m
- mi	Merge onto I-94 West toward Kalamazoo	34 mi
mi	Take exit 74B to merge onto US-131 North toward Grand Rapids	15 mi
4 mi	Take exit 49A for M-89 E toward Plainwell	0.4 m
	Turn right at Allegan St/M-89	
l mi	Continue to follow Allegan St/M-89	0.9 mi
3 mi	Continue to follow E Bridge St/M-89	1.0 mi
7 mi	Turn right at 8th St	
	Continue on 8th St	0.7 mi
	End at Riverview Rd/Riverview Dr Entrance	
7 mi	FROM:	
3 mi	Cross Riverview Rd Continue on 8th St toward E Bridge St/M-89	0.7 m
	Turn left at E Bridge St/M-89	
3 mi	Continue to follow E Bridge St/M-89	1.0 mi
mi	Continue to follow Allegan St/M-89	0.9 m
- mi	Merge onto US-131 South toward Kalamazoo	15 mi
3 mi	Take exit 34A and merge onto for I-94 East toward Detroit	34 mi
9 mi	Take exit 108 for I-69 North toward Lansing	3.3 m
9 mi	Take exit 42 for N Dr. North and turn left at N Dr. North	0.9 mi
2 mi	Turn right at 15 1/2 Mile Rd	0.9 mi
1 mi	Slight right at 15 Mile Rd	0.2 m
	Turn left at P Dr. North	0.1 mi
	End C & C Landfill entrance	

Turn left at P Dr. North	0.1 m
End C & C Landfill entrance	
DIDENTIONS TO SERVICE STATES AND A SERVICE STATES	DIV. 1 DV
DIRECTIONS TO/FROM STAGING AREA 2 AND C & C LANDFILL - F	RIMARY
TO:	
Turn right at P Dr. North	0.1 m
Turn right at 15 Mile Rd	0.2 m
Slight left at 15 1/2 Mile Rd	0.9 m
Turn left at N Dr. North	0.9 m
Merge onto I-69 South toward Ft. Wayne	3.3 m
Merge onto I-94 West toward Kalamazoo	34 m
Take exit 74B to merge onto US-131 North toward Grand Rapids	15 mi
Take exit 49A for M-89 E toward Plainwell	0.4 m
Turn right at Allegan St/M-89	0.7 m
Turn right at S Main St	0.5 m
Continue on 10th St/Douglas Rd	1.1 m
End at 10th St/Douglas Rd Entrance	
FROM:	
Turn right on 10th St/Douglas Rd toward 102nd Ave/Starr Rd	1.1 m
Continue on S Main St	0.5 m
Turn left at Allegan St/M-89	
Continue to follow M-89	1.0 m
Merge onto US-131 South toward Kalamazoo	15 mi
Take exit 34A and merge onto for I-94 East toward Detroit	34 m
Take exit 108 for I-69 North toward Lansing	3.3 m
Take exit 42 for N Dr. North and turn left at N Dr. North	0.9 m
Turn right at 15 1/2 Mile Rd	0.9 m
Slight right at 15 Mile Rd	0.2 m
Turn left at P Dr. North	0.1 m
End C & C Landfill entrance	

DIRECTIONS TO/FROM STAGING AREA 2 AND C & C LANDFILL - AL	IERNAT
TO:	
Turn right at P Dr. North	0.1 m
Turn right at 15 Mile Rd	0.2 n
Slight left at 15 1/2 Mile Rd	0.9 n
Turn left at N Dr. North	0.9 n
Merge onto I-69 South toward Ft. Wayne	3.3 n
Merge onto I-94 West toward Kalamazoo	34 m
Take exit 74B to merge anto US-131 North toward Grand Rapids	15 m
Take exit 44 for D Ave	0.4 n
Turn right at W D Ave	2.7 m
Turn left at 10th St/Douglas Rd	3.6 n
End at 10th St/Douglas Rd Entrance	
FROM:	
Turn left on 10th St/Douglas Rd toward 102nd Ave/Starr Rd	3.6 m
Turn right at W D Ave	2.5 m
Merge onto US-131 South toward Kalamazoo	15 m
Take exit 34A and merge onto for I-94 East toward Detroit	34 m
Take exit 108 for I-69 North toward Lansing	3.3 n
Take exit 42 for N Dr. North and turn left at N Dr. North	0.9 n
Turn right at 15 1/2 Mile Rd	0.9 n
Slight right at 15 Mile Rd	0.2 m
Turn left at P Dr. North	0.1 m
End C & C Landfill entrance	

NOTES:



INSET MAP (C & C LANDFILL)

1000' 2000'

KALAMAZOO RIVER STUDY GROUP ALLIED PAPER, INC/PORTAGE CREEK/ KALAMAZOO RIVER SUPERFUND SITE PLAINWELL NO. 2 DAM AREA TIME-CRITICAL

MARSHALI

REMOVAL ACTION TRAFFIC CONTROL PLAN

ACCESS ROUTE AND DIRECTIONS TO C & C LANDFILL

FIGURE

4-1



ACCESS OFF-ROAD TRUCK TRAFFIC



STAGING AREA

PRIMARY TRUCK ROUTE

LEGEND:

ALTERNATE TRUCK ROUTE

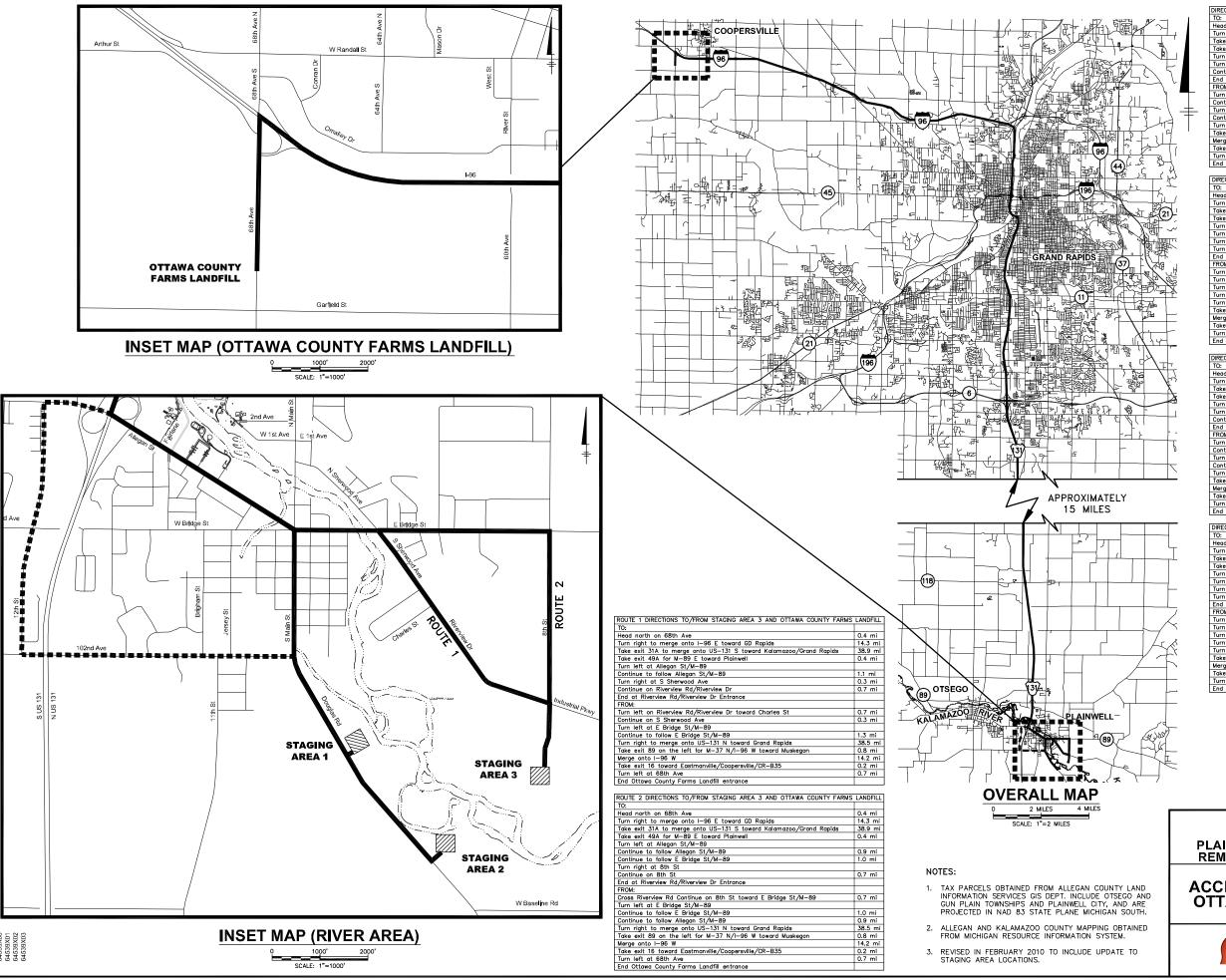
3. REVISED IN FEBRUARY 2010 TO INCLUDE UPDATE TO STAGING AREA LOCATIONS.

RESOURCE INFORMATION SYSTEM.

2 ALLEGAN AND KALAMAZOO COUNTY MAPPING OBTAINED FROM MICHIGAN

1. TAX PARCELS OBTAINED FROM ALLEGAN COUNTY LAND INFORMATION SERVICES

GIS DEPT. INCLUDE OTSEGO AND GUN PLAIN TOWNSHIPS AND PLAINWELL CITY, AND ARE PROJECTED IN NAD 83 STATE PLANE MICHIGAN SOUTH.



DIRECTIONS TO/FROM STAGING AREA 1 AND OTTAWA COUNTY FARMS LANDFILL -	PRIMARY
TO:	
Head north on 68th Ave	0.4 mi
Turn right to merge onto I—96 E toward GD Rapids	14.3 mi
Take exit 31A to merge onto US-131 S toward Kalamazoo/Grand Rapids	38.9 mi
Take exit 49A for M-89 E toward Plainwell	0.4 mi
Turn left at Allegan St/M-89	0.7 mi
Turn right at S Main St	0.5 mi
Continue on 10th St/Douglas Rd	0.4 mi
End at 10th St/Douglas Rd Entrance	
FROM:	
Turn right on 10th St/Douglas Rd toward 102nd Ave/Starr Rd	0.4 mi
Continue on S Main St	0.5 mi
Turn left at Allegan St/M-89	
Continue to follow M-89	1.0 mi
Turn right to merge onto US-131 N toward Grand Rapids	38.5 mi
Take exit 89 on the left for M-37 N/I-96 W toward Muskegon	0.8 mi
Merge onto I-96 W	14.2 mi
Take exit 16 toward Eastmanville/Coopersville/CR-B35	0.2 mi
Turn left at 68th Ave	0.7 mi
End Ottawa County Farms Landfill entrance	

DIRECTIONS TO/FROM STAGING AREA 1 AND OTTAWA COUNTY FARMS LANDFILL	- ALTERNATI
TO:	
Head north on 68th Ave	0.4 mi
Turn right to merge onto I-96 E toward GD Rapids	14.3 mi
Take exit 31A to merge onto US-131 S toward Kalamazoo/Grand Rapids	38.9 mi
Take exit 49B for M-89 W toward Otsego	0.3 mi
Turn right at Allegan St/M-89 W	0.2 mi
Turn left at 12th St	1.0 mi
Turn left at 102nd Ave/Starr Rd	1.1 mi
Turn right at 10th St/Douglas Rd	0.4 mi
End at 10th St/Douglas Rd Entrance	
FROM:	
Turn right on 10th St/Douglas Rd toward 102nd Ave/Starr Rd	0.4 mi
Turn left at 102nd Ave/Starr Rd	1.1 mi
Turn right at 12th St	1.0 mi
Turn right at Allegan St/M-89	0.4 mi
Turn left to merge onto US-131 N toward Grand Rapids	38.5 m
Take exit 89 on the left for M-37 N/I-96 W toward Muskegon	0.8 mi
Merge onto I-96 W	14.2 mi
Take exit 16 toward Eastmanville/Coopersville/CR-B35	0.2 mi
Turn left at 68th Ave	0.7 mi
End Ottawa County Farms Landfill entrance	

DIRECTIONS TO/FROM STAGING AREA 2 AND OTTAWA COUNTY FARMS LANDFILL -	PRIMAR'						
TO:							
Head north on 68th Ave	0.4 mi						
Turn right to merge onto I-96 E toward GD Rapids							
Take exit 31A to merge onto US-131 S toward Kalamazoo/Grand Rapids							
Take exit 49A for M-89 E toward Plainwell	0.4 mi						
Turn left at Allegan St/M-89	0.7 mi						
Turn right at S Main St	0.5 mi						
Continue on 10th St/Douglas Rd	1.1 mi						
End at 10th St/Douglas Rd Entrance							
FROM:							
Turn right on 10th St/Douglas Rd toward 102nd Ave/Starr Rd							
Continue on S Main St							
Turn left at Allegan St/M-89							
Continue to follow M-89	1.0 mi						
Turn right to merge onto US-131 N toward Grand Rapids	38.5 m						
Take exit 89 on the left for M-37 N/I-96 W toward Muskegon							
Merge onto I-96 W							
Take exit 16 toward Eastmanville/Coopersville/CR-B35							
Turn left at 68th Ave	0.7 mi						
End Ottawa County Farms Landfill entrance							

DIRECTIONS TO/FROM STAGING AREA 2 AND OTTAWA COUNTY FARMS LANDFILL -	ALTERNATI					
TO:						
Head north on 68th Ave	0.4 mi					
Turn right to merge onto I-96 E toward GD Rapids	14.3 mi					
Take exit 31A to merge onto US-131 S toward Kalamazoo/Grand Rapids	38.9 mi					
Take exit 49B for M-89 W toward Otsego	0.3 mi					
Turn right at Allegan St/M-89 W	0.2 mi					
Turn left at 12th St	1.0 mi					
Turn left at 102nd Ave/Starr Rd	1.1 mi					
Turn right at 10th St/Douglas Rd	1.1 mi					
End at 10th St/Douglas Rd Entrance						
FROM:						
Turn right on 10th St/Douglas Rd toward 102nd Ave/Starr Rd	1.1 mi					
Turn left at 102nd Ave/Starr Rd						
Turn right at 12th St	1.0 mi					
Turn right at Allegan St/M-89	0.4 mi					
Turn left to merge onto US-131 N toward Grand Rapids	38.5 m					
Take exit 89 on the left for M-37 N/I-96 W toward Muskegon	0.8 mi					
Merge onto I-96 W	14.2 mi					
Take exit 16 toward Eastmanville/Coopersville/CR-B35	0.2 mi					
Turn left at 68th Ave	0.7 mi					
End Ottawa County Farms Landfill entrance						

LEGEND:

ACCESS OFF-ROAD TRUCK TRAFFIC



STAGING AREA

■ ■ ■ ■ ALTERNATE TRUCK ROUTE

PRIMARY TRUCK ROUTE

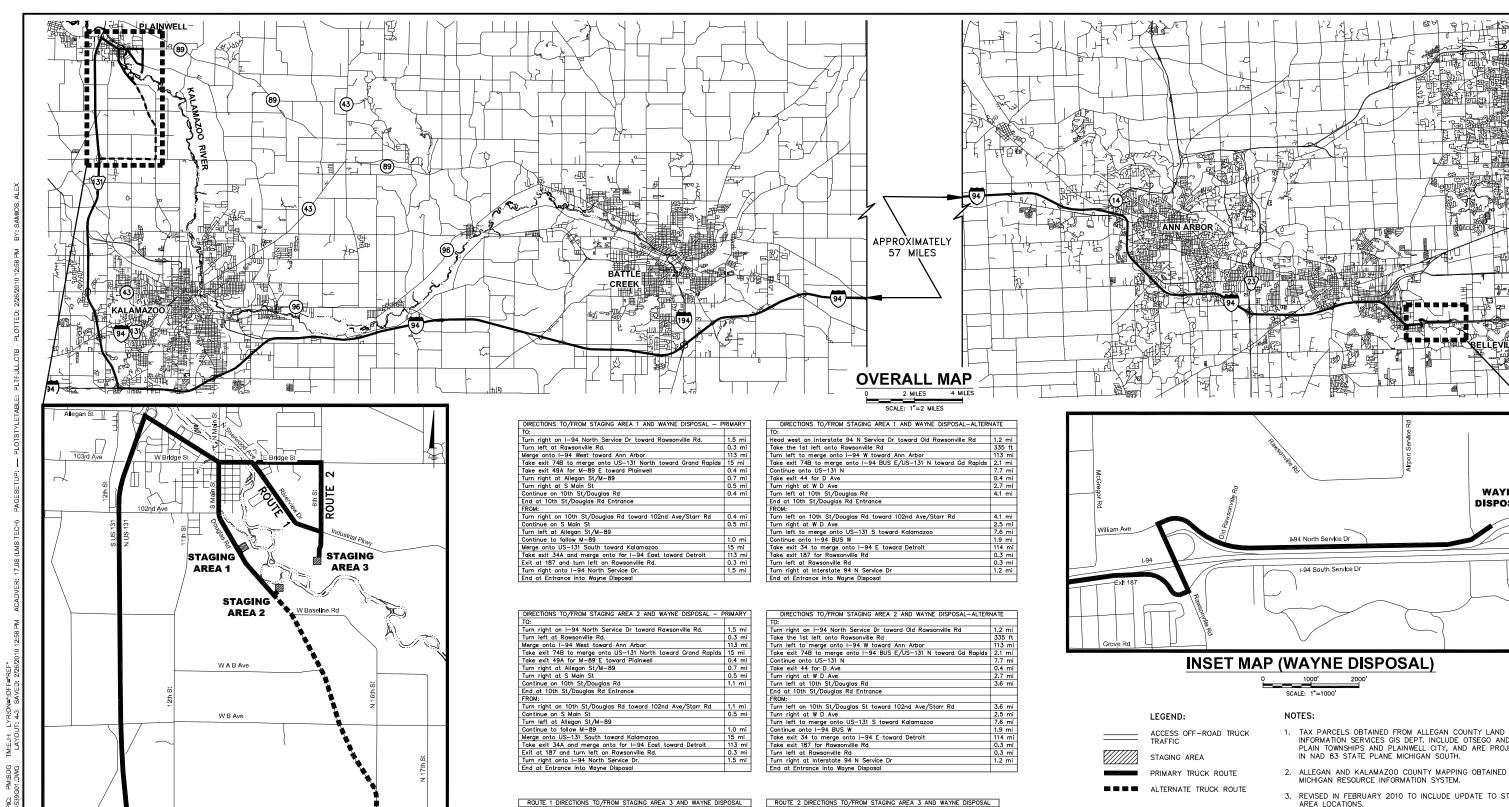
KALAMAZOO RIVER STUDY GROUP ALLIED PAPER, INC/PORTAGE CREEK/ KALAMAZOO RIVER SUPERFUND SITE

PLAINWELL NO. 2 DAM AREA TIME-CRITICAL REMOVAL ACTION TRAFFIC CONTROL PLAN

ACCESS ROUTE AND DIRECTIONS TO OTTAWA COUNTY FARMS LANDFILL



FIGURE 4-2



10:
Turn right on I-94 North Service Dr toward Rawsonville Rd
Turn left at Rawsonville Rd
Merge onto I-94 West toward Ann Arbor
Take exit 748 to merge onto US-131 North toward Grand Rapids
Take exit 49A for M-89 E toward Plainwell
Turn right at Allegan St/M-89
Turn right at Sherwood Ave
Turn right at Sherwood Ave
Turn right at Sherwood Ave
Continue on Riverview Rd/Riverview Dr

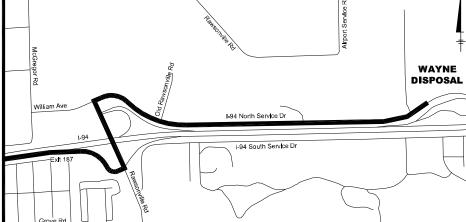
FROM:
Turn left on Riverview Rd/Riverview Dr toward Charles St
Continue on S Sherwood Ave
Turn left at E Bridge St/M-89
Continue to follow E Bridge St/M-89
Merge onto US-131 South toward Kolamazoo
Take exit 34A and merge onto for I-94 East toward Detroit
Exit at 187 and turn left on Rawsonville Rd
Turn right onto I-94 North Service Dr
End at Entrance into Wayne Disposal

Continue on Riverview Rd/Riverview Dr End at Riverview Rd/Riverview Dr Entrance

W C Ave

INSET MAP (RIVER AREA)

0 2500' SCALE: 1"=2500'



INSET MAP (WAYNE DISPOSAL)

INFORMATION SERVICES GIS DEPT. INCLUDE OTSEGO AND GUN PLAIN TOWNSHIPS AND PLAINWELL CITY, AND ARE PROJECTED IN NAD 83 STATE PLANE MICHIGAN SOUTH.

RELLEVILLE

- ALLEGAN AND KALAMAZOO COUNTY MAPPING OBTAINED FROM MICHIGAN RESOURCE INFORMATION SYSTEM.
- 3. REVISED IN FEBRUARY 2010 TO INCLUDE UPDATE TO STAGING

KALAMAZOO RIVER STUDY GROUP ALLIED PAPER, INC/PORTAGE CREEK/ KALAMAZOO RIVER SUPERFUND SITE

PLAINWELL NO. 2 DAM AREA TIME-CRITICAL REMOVAL ACTION TRAFFIC CONTROL PLAN

ACCESS ROUTE AND DIRECTIONS TO WAYNE DISPOSAL



FIGURE 4-3

Appendix A

Example Hazardous Waste Manifest

Plea	ase pri	nt or type. (Form desig			riter.) 🛚							n Approved.	OMB No.	2050-0039			
 	UNIFORM HAZARDOUS WASTE MANIFEST 1. Generator ID Number 2. Page 1						ge 1 of 3. Emergency Response Phone 4. Manifest Tracking Number										
	5. Generator's Name and Mailing Address Generator's Site Address (if different than mailing address)																
		Generator's Phone: 6. Transporter 1 Company Name								U.S. EPA ID Number							
	o. Ira									C.O. LI AID NUMBE							
	7. Tra	7. Transporter 2 Company Name								U.S. EPA ID N	lumber						
		7. Iransporter 2 Company Name															
	8. De:	8. Designated Facility Name and Site Address								U.S. EPA ID Number							
		t de Dhana								1							
	-	ty's Phone: 9b. U.S. DOT Descripti	on (including Proper	Shinning Name Haza	urd Class ID Numbo	r	T	10. Contair	ners	MA Total	40.11.7						
	9a. HM	and Packing Group (if		Shipping Name, Haza	iru Ciass, iD Numbe	ι,	ľ	No.	Туре	11. Total Quantity	12. Unit Wt./Vol.	13.	13. Waste Codes				
 22		1.															
12																	
GENERATOR	<u> </u>	2.															
崽		2.															
П																	
		3.															
	<u> </u>	4.															
		7.															
	14. S	pecial Handling Instruction	ns and Additional Info	ormation													
		GENERATOR'S/OFFERO															
		marked and labeled/placa Exporter, I certify that the	rded, and are in all r contents of this cons	espects in proper conditions to the	dition for transport a e terms of the attac	ccording to appl hed EPA Acknov	licable inter wledament	national and nation of Consent.	onal governm	nental regulations.	If export shi	pment and I	am the Prim	ary			
	0 1	I certify that the waste mir	imization statement			arge quantity ger	nerator) or		ll quantity ger	nerator) is true.							
	Gener	rator's/Offeror's Printed/Ty	ped Name			Si	gnature					Mor I	nth Day	Year I			
<u> </u>	16 Int	ternational Shipments			Г	\dashv											
TR ANSPORTER INT'L		sporter signature (for expo	Import to	to U.S.	[Export from	U.S.	Port of ent Date leavir	-								
꼾		ansporter Acknowledgmer		rials	<u> </u>			Date leavil	ig 0.0 i								
M	Trans	porter 1 Printed/Typed Na	me			Siç	gnature					Mor	th Day	Year			
SP(
\ \ \	Irans	porter 2 Printed/Typed Na	me			Si	gnature					Mor I	nth Day I	Year I			
	18 Di	screpancy															
 	-	Discrepancy Indication Sp.	ace .					7		<u> </u>			7				
	Type Residue P							L Partial Rej	Partial Rejection Full Rejection								
							Ma	anifest Reference	Number:								
	18b. Alternate Facility (or Generator) U.S. EPA ID Number																
AC.										1							
	Facility's Phone: 18c. Signature of Alternate Facility (or Generator) Month Day								/ Year								
¥									1								
DESIGNATED FACILITY	19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)									•							
ᆷ	1.			2.		3.				4.							
	20 0	esignated Escility Owner	or Operator: Cartifica	ation of receipt of he	rdoue materials serv	ared by the men	nifeet avaca	at ac noted in Item	182								
$\ $	20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a Printed/Typed Name Signature										Мо	nth Day	Year				
П										- 1	1	1					

Appendix B

Example Non-Hazardous Waste Manifest

NON-HAZARDOUS WASTE

NON-HAZARDOUS WASTE MANIFEST

Pleas	se print or type (Form designed for use on elite (12 pitch) typewriter)								
	NON-HAZARDOUS WASTE MANIFEST	1. Generator's US EPA ID No.			Manifest Document No.		2. Page 1	1		
	3. Generator's Name and Mailing Address									
	4. Generator's Phone ()									
	5. Transporter 1 Company Name	6.	US EPA ID Number		A. State Trans	porter's ID				
					B. Transporter					
	7. Transporter 2 Company Name	8.	US EPA ID Number		C. State Transporter's ID					
		D. Transporter 2 Phone								
	Designated Facility Name and Site Address	E. State Facility's ID								
		F. Facility's Phone								
	11. WASTE DESCRIPTION			12. Co	ontainers 13. 14. Unit					
				No.	Туре	Quantity	W	Jnit /t./Vol.		
	a.									
GENER	b.									
A T	С.									
O R	d.									
	G. Additional Descriptions for Materials Listed Above	re ·			H. Handling Co	odes for Wastes Listed Abov	е			
	15. Special Handling Instructions and Additional Information									
	16. GENERATOR'S CERTIFICATION: I hereby cer in proper condition for transport. The materials of the proper condition for transport.	rtify that the contents of this shipmen described on this manifest are not su	nt are fully and accurately described abject to federal hazardous waste reg	and are in gulations.	all respects					
							Date			
	Printed/Typed Name		Signature			Mon	th Day	Year		
Ţ	17. Transporter 1 Acknowledgement of Receipt of M	Materials					Date			
K A N S	Printed/Typed Name		Signature			Mon	th Day	Year		
PO	18. Transporter 2 Acknowledgement of Receipt of M	/laterials					Date			
-R4Z%PORHER	Printed/Typed Name		Signature			Mon	th Day	Year		
F A C	19. Discrepancy Indication Space									
L	20. Facility Owner or Operator; Certification of receipt	ipt of the waste materials covered by	this manifest, except as noted in ite	m 19.						
	Drietad/Tuped No	i	Cimachura				Date			
T Y	Printed/Typed Name		Signature			Mon	th Day	Year		